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Substitute for form 1449A/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/088,866
(use as many sheets as necessary)				Filing Date	July 2, 2002
Sheet 1 of 14				First Named Inventor	Ludger Dinkelborg et al.
				Group Art Unit	1643
				Examiner Name	Unknown
				Attorney Docket Number	SCH-1869

U.S. PATENT DOCUMENTS				
Examiner Initials *	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	Cite No. <sup>1</sup>	Number		
A1	5,734,025		KOMAI et al.	03-1998
A2	5,849,701		ROBERTS et al.	12-1998
A3	5,747,452		RUOSLAHTI et al.	05-1998
A4	5,837,813		RUOSLAHTI et al.	11-1998
A5	5,523,229		FEINBERG et al.	06-1996
A6	6,696,245		WINTER et al.	02-2004
A7	5,710,134		BOSSLET et al.	01-1998
A8	6,140,470		GAREN et al.	10-2000
A9	5,648,485		DOLPHIN et al.	07-15-1997
A10	5,817,776		GOODMAN et al.	10-06-1998
A11	5,831,088		DOLPHIN et al.	11-03-1998
A12	5,843,156		SLEPIAN et al.	12-01-1998
A13	5,877,289		THORPE et al.	03-02-1999
A14	5,913,884		TRAUNER et al.	06-22-1999
A15	5,976,535		FRITZBERG et al.	11-02-1999
A16	6,004,555		THORPE et al.	12-21-1999
A17	6,015,897		THEODORE et al.	01-18-2000
A18	6,036,955		THORPE et al.	03-14-2000
A19	6,051,230		THORPE et al.	04-18-2000
A20	6,093,399		THORPE et al.	07-25-2000
A21	4,894,326		MATSUURA et al.	01-16-1990
A22	6,749,853		THORPE et al.	06-15-2004
A23	6,394,952		ANDERSON et al.	05-28-2002
A24	6,267,722		ANDERSON et al.	07-31-2001
A25	5,177,015		MATSUURA et al.	01-05-1993
A26	2004/0013640		ZARDI et al.	01-22-2004

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A27	2004/0001790	HILGER et al.	01-01-2004
A28	5,243,029	MATUSUURA et al.	09-07-1993
A29	6,171,578	Dean et al.	01-2001
A30	5,534,254	Huston et al.	07-1996
A31	5,876,691	Chester et al.	03-1999
A32	6,342,219	Thorpe et al.	01-2002
A33	RE35,500	Rhodes, Buck A.	05-1997
A34	7,273,924	B1 Neri et al.	09-2007
A35	6,749,853	Thorpe et al.	06-2004
A36	5,177,015	MATSUURA et al.	01-1993
A37	5,837,813	Ruosalhti et al.	11-1998
A38	7,273,924	Philogen S.p.A.	09-25-2007

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No.†	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T‡
		Office <sup>§</sup>	Number <sup>§</sup>				
B1	WO 9958570	Dario	NERI et al.	Dario NERI et al.	10-18-1999		
B2	WO 0162800	Dario	NERI et al.	Dario NERI et al.	08-30-2001		
B3	JP 0276598	SEKIGUCHI	et al.	SEKIGUCHI et al.	03-15-1990		✓
B4	JP 4169195	SEKIGUCHI	et al.	SEKIGUCHI et al.	06-17-1992		✓
B5	WO 9745544	Medical Res Council		Medical Res Council	12-04-1997		
B6	WO 96/23816	CREIGHTON	et al.	CREIGHTON et al.	08-08-1996		
B7	EP 184187	KUDO	et al.	KUDO et al.	06-11-1986		
B8	EP 239400	WINTER	et al.	WINTER et al.	09-30-1987		
B9	EP 0120694	BOSS	et al.	BOSS et al.	10-03-1984		
B10	WO 94/13804	HOLLIGER	et al.	HOLLIGER et al.	06-23-1994		
B11	WO 93/11161	WHITLOW	et al.	WHITLOW et al.	06-10-1993		
B12	GB 2188638	NEUBERGER	et al.	NEUBERGER et al.	10-07-1987		
B13	EP 0125023	CABILLY	et al.	CABILLY et al.	11-14-1984		

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(use as many sheets as necessary)				Attorney Docket Number
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Sheet	4	of	14		

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No. *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, (pages), volume-issue number(s), publisher, city and/or country where published.			
	C1	TOMOHIKO FUKUDA ET AL., "Mice lacking the EDB segment of fibronectin develop normally but exhibit reduced cell growth and fibronectin matrix assembly in vitro," Cancer Research, 1 October 2002, pages 5603-5610, vol. 62.			
	C2	ANDREW GRIFFITHS ET AL., "Isolation of high affinity human antibodies directly from large synthetic repositories," The EMBO Journal, 1994, pages 3245-3260, vol. 13, no. 14.			
	C3	Dario NERI et al., "Targeting by affinity-matured recombinant antibody fragments of an angiogenesis associated fibronectin isoform", Nature Biotechnology, Vol. 15, November 1997, pages 1271-1275			
	C4	Dario NERI et al., "Affinity reagents against tumour-associated extracellular molecules and newforming vessels," Advanced Drug Delivery Reviews, 6 April 1998, pages 43-52, vol. 31, no. 1-2, XP002124780, pages 46, right-hand column, page 49, left-hand column.			
	C5	PINI, A., et al., "Design and use of a phage display library. Human antibodies with subnanomolar affinity against a marker of angiogenesis eluted from a two-dimensional gel," Journal of Biological Chemistry, August 21, 1998, pages 21769-21776, Vol. 273, no. 34, XP002124781.			
	C6	VITI F. ET AL., "Increased Binding Affinity and Valence of Recombinant Antibody Fragments Lead to Improved Targeting of Tumoral Angiogenesis," Cancer Research, 15 January 1999, pp. 347-352, vol. 59, no. 2, XP002124782, the whole document.			
	C7	R. FATTORUSSO ET AL., "NMR structure of the human oncofetal fibronectin ED-B domain, a specific marker for angiogenesis", 15 April 1999, Structure, pp. 381-390, vol. 7, no. 4, XP002124783.			
	C8	TARLI L ET AL., "A high-affinity human antibody that targets tumoral blood vessels," Blood, 1 Jul 1999, pages 192-8, vol. 94, no. 1, XP002124784.			
	C9	M. ZALUTSKY ET AL., "Labeling monoclonal antibodies and F(ab')2 fragments with the alpha-particle-emitting nuclide astatine-211: preservation of immunoreactivity and in vivo localization," Proceedings of the National Academy of Sciences in the U.S.A., September 1989, vol. 86, no. 18, pages 7149-7153, XP002172060, Washington DC, USA, abstract.			
	C10	S. LINDEGREN ET AL., "Chloramine-T and high-specific-activity radioiodination of antibodies using N-succinimidyl-3-(trimethylsilyl)benzoate as an intermediate," Nuclear Medicine and Biology, October 1998, pages 659-665, vol. 25, no. 7, XP004149436, Oxford, GB, abstract.			

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C11	M. BIRCHLER ET AL., "Selective targeting and photocoagulation of ocular angiogenesis mediated by a phage-derived human antibody fragment," <i>Nature Biotechnology</i> , October 1999, pages 984-988, vol. 17, no. 10, XP002172061, New York, NY, USA, the whole document.
C12	Judah FOLKMAN, "Angiogenesis in cancer, vascular, rheumatoid and other disease", <i>Nature Medicine</i> , Vol. 1, Number 1, 1995, pages 27-31
C13	Renata PASQUALINI et al., "α-Vinintegrins as receptors for tumor targeting by circulating ligands", <i>Nature Biotechnology</i> , Vol. 15, June 1997, pages 542-546.
C14	Michael S. O'REILLY et al., "Angiostatin induces and sustains dormancy of human primary tumors in mice", <i>Nature Medicine</i> , Vol. 12, Number 6, June 1996, pages 689-692
C15	Xianming HUANG et al., "Tumor Infarction in Mice by Antibody-Directed Targeting of Tissue Factor to Tumor Vasculature", <i>Science</i> , Vol. 275, January 24, 1997, pages 547-550
C16	Dario NERI et al., "Biophysical methods for the determination of antibody-antigen affinities", <i>Tibtech</i> (Vol. 14), December 1996, pages 465-470
C17	E. Sally WARD et al., "Binding activities of a repertoire of sige immunoglobulin variable domains secreted from <i>Escherichia coli</i> ", <i>Nature</i> , Vol. 341, No. 6242, October 12, 1989, pages 544-546.
C18	James S. HUSTON, et al., "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in <i>Escherichia coli</i> ", <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 85, August 1988, pages 5879-5883
C19	Philipp HOLLIGER, et al., "Diabodies": Small bivalent and bispecific antibody fragments", <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 90, July 1993, pages 6444-6448
C20	Philipp HOLLIGER, et al., "Engineering bispecific antibodies", <i>Current Opinion in Biotechnology</i> , Vol. 4, No. 4, 1993, pages 446-449
C21	Cyrus CHOTHIA, et al., "Canonical Structures for the Hypervariable Regions of Immunoglobulins", <i>Journal of Molecular Biology</i> , Vol. 196, No. 4, August 20, 1987, pages 901-917
C22	D. NERI, et al., "Multipurpose High Sensitivity Luminescence Analyizer (LUANA): Use in Gel Electrophoresis", <i>Biotechniques</i> , Vol. 20, No. 4, April 1996, pages 708-712
C23	Ian M. TOMLINSON, et al., "The Repertoire of Human Germline V <sub>H</sub> Sequence Reveals about Fifty Groups of V <sub>H</sub> Segments with Different Hypervariable Loops", <i>Academic Press</i> , Vol. 227, No. 3, October 5, 1992, pages 776-798

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C24	Johnathan P. L. COX, et al, "A directory of human germ-line V <sub>κ</sub> segments reveals a strong bias in their usage", European Journal of Immunology 4/1994, pages 827-836	
C25	James D. MARKS, et al., "By-passing Immunization Human Antibodies from V-gene Libraries Displayed on Phage", Journal of Molecular Biology", Vol. 222, No. 3, December 5, 1991, pages 581-597	
C26	Hennie R. HOOGENBOOM, et al., "Multi-subunit proteins on the surface of filamentous phage: methodologies for displaying antibody (FAB) heavy and light chains", Nucleic Acids Research, Vol. 19, No. 15, August 11, 1991, pages 4133-4137	
C27	Dario NERI, et al., "Radioactive labeling of recombinant antibody fragments by phosphorylation using human casein kinase II and [ $\gamma$ - <sup>32</sup> P]-ATP, Nature Biotechnology, Vol. 14, No. 4, April 1996, pages 485-490	
C28	Robert SCHIER, et al., "Identification of functional and structural amino-acid residues by parsimonious mutagenesis" Gene, Vol. 169, (1996), No. 2, pages 147-155	
C29	Wataru ITO, et al., "Mutations in the Complementarity-determining Regions do not cause Differences in Free Energy during the Process of Formation of the Activated Complex between an Antibody and the Corresponding Protein Antigen", Journal of Molecular Biology, Vol. 248, No. 4, May 12, 1995, pages 729-732	
C30	C. HAMERS-CASTERMAN, et al., "Naturally occurring antibodies devoid of light chains", International Weekly Journal of Science, Vol. 363, NO. 6428, June 3, 1993, pages 446-448	
C31	U. JÖNSSON, et al., "Real-Time Biospecific Interaction Analysis Using Surface Plasmon Resonance and a Sensor Chip Technology", Biotechniques, Vol. 11, No. 5, November 1991, pages 620-627	
C32	Ahuva NISSIM, et al., "Antibody fragments from a 'single pot' phage display library as immunochemical reagents", The Embo Journal, Vol. 13, No. 3, February 1, 1994, pages 692-698	
C33	Alessandro PINI, et al., "Hierarchical affinity maturation of a phage library derived antibody for the selective removal of cytomegalovirus from plasma", Journal of Immunological Methods, Vol. 206, nos.1-2, 1997, pages 171-182	
C34	Daniel R. DEAVER, "A new non-isotopic detection system for immunoassays", Nature, Vol. 377, No. 6551, October 26, 1995, pages 758-760	
C35	Matsuura H., Takio K., Titani K., Greene T., Levery SB, Salyan ME, Hakomori S., J. Biol. Chem. 263, 3314-3322. "The oncofetal structure of human fibronectin defined by monoclonal antibody FDC-6. Unique structural requirement for the antigenic specificity provided by a glycosylhexapeptide", March 1988. Abstract Only	

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C36	Zheng, M. ET AL., <i>Int. J. Pept. Protein Res.</i> , <b>43</b> , 230-8, "Synthetic immunochemistry of glycohexapeptide analogues characteristic of oncofetal fibronectin. Solid-phase synthesis and antigenic activity"; March 1994. Abstract Only	
C37	Feinberg, RF, Kliman HJ, Bedian V, Monzon-Bordonaba F, Menzin AW, Wang CL; Am. J. Obstet. Gynecol. <b>172</b> , 1526-1536; "Monoclonal antibody X18A4 identifies an oncofetal fibronectin epitope distinct from the FDC-6 binding site"; May 1995. Abstract Only	
C38	Paul K. Schick, Carol M. Wojenski, Vickie D. Bennett, and Tamara Ivanova; "The Synthesis and Localization of Alternatively Spliced Fibronectin EIIIB in Resting and Thrombin-Treated Megakaryocytes"; <i>Blood</i> , Vol. 87, No. 5, March 1, 1996; pp. 1817-1823	
C39	Denise G. White, James W. Hall, David W. Brandl, Amy L. Gehris, and Vickie D. Bennett; "Chick Cartilage Fibronectin Differs in Structure from the Fibronectin in Limb Mesenchyme"; 1996; <i>Exp. Cell Res.</i> 224, pp. 391-402	
C40	MARIANI ET AL., "Tumor Targeting Potential of the Monoclonal Antibody BC-1 against Oncofetal Fibronectin in Nude Mice Bearing Human Tumor Implants," <i>The American Cancer Society</i> , 15 December 1997, pp. 2378-2384, vol. 80, no. 12.	
C41	DARIO NERI ET AL., "Antibodies from phage display libraries as immunochemical reagents," <i>Methods in Molecular Biology, Immunochemical protocols</i> , 2 <sup>nd</sup> ed., pp. 475-500, vol. 80.	
C42	BIRCHLER ET AL., "Infrared photodetection for the <i>in vivo</i> localisation of phage-derived antibodies directed against angiogenic markers," <i>Journal of Immunological Methods</i> , 1999, pages 239-248, vol. 231.	
C43	FREDRIK NILSSON ET AL., "Targeted Delivery of Tissue Factor to the ED-B Domain of Fibronectin, a Marker of Angiogenesis, Mediates the Infarction of Solid Tumors in Mice," <i>Cancer Research</i> , 15 January 2001, pages 711-716, vol. 61.	
C44	HALIN ET AL., "Antibody-based targeting of Angiogenesis," <i>Critical Reviews in Therapeutic Drug Carriers Systems</i> , 2001, pages 299-339, vol. 28, no. 3.	
C45	LEONARDO GIOVANNONI ET AL., "Isolation of anti-angiogenesis antibodies from a large combinatorial repertoire by colony filter screening," <i>Nucleic Acids Research</i> , 2001, vol. 9, no. 5, e27.	
C46	SALVATORE DEMARTI ET AL., "Selective targeting of tumour neovasculature by a radiohalogenated human antibody fragment specific for the ED-B domain of fibronectin," <i>European Journal of Nuclear Medicine</i> , April 2001, short communication, vol. 28, no. 4.	
C47	BARBARA CARNEMOLLA ET AL., "Enhancement of the antitumor properties of interleukin-2 by its targeted delivery to the tumor blood vessel extracellular matrix," <i>Hemostasis, Thrombosis, and Vascular Biology, Blood</i> , 1 March 2002, pages 1659-1665, vol. 99, no. 5.	
C48	HALIN ET AL., "Enhancement of the antitumor properties of interleukin-12 by its targeted delivery to the tumor blood vessel extracellular matrix," <i>Nature Biotechnology</i> , March 2002, pages 264-269, vol. 20.	

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	C MARTY ET AL., "Cytotoxic targeting of F9 teratocarcinoma tumours with anti-ED-B fibronectin scFv antibody modified liposomes," British Journal of Cancer, 2002, pages 106-112, vol. 87, Cancer Research UK.	
C49	SAMU MELKKO ET AL., "An antibody-calamodulin fusion protein reveals a functional dependence between macromolecular isoelectric point and tumor targeting performance," Int. J. Radiation Oncology Biol. Phys., 2002, pages 1485-1490, vol. 54, no. 5.	
C50	PATRIZIA CASTELLANI ET AL., "Differentiation between High- and Low-Grade Astrocytoma Using Human Recombinant Antibody to the Extra-Domain-B of Fibronectin," American Journal of Pathology, November 2002, 169S-1700, vol. 161, no. 5, American Society for Investigative Pathology.	
C51	M SANTIMARIA ET AL., "Immunoscintigraphic Detection of the ED-B Domain of Fibronectin, a Marker of Angiogenesis, in Patients with Cancer," Clinical Cancer Research, February 2003, pages 571-579, vol. 9.	
C52	J SCHEUERMANN ET AL., "Discovery and investigation of lead compounds as binders to the extra-domain B of the angiogenesis marker, fibronectin," Drug Development Research, 2003, pages 268-282, vol. 58.	
C53	HALIN ET AL., "Synergistic therapeutic effects of a tumor targeting antibody fragment, fused to interleukin 12 and to tumor necrosis factor $\alpha$ ," Cancer Research, 15 June 2003, pages 3202-3210, vol. 63.	
C54	L BORSI ET AL., "Selective targeted delivery of TNF $\alpha$ to tumor blood vessels," Blood First Edition Paper, prepublished online 21 August 2003, American Society of Hematology, DOI 10.1182/blood-2003-04-1039.	
C55	M NICOLÒ ET AL., "Expression of Extradomain-B-containing Fibronectin in Subretinal Choroidal Neovascular Membranes," 2003, Elsevier Science Inc. page 7	
C56	F VITI ET AL., "Recombinant antibodies for the selective targeting of tumor neovasculature," Current Opinion in Drug Discovery & Development, 2002, pages 204-213, vol. 5, no. 2.	
C57	F VITI ET AL., "Phage display libraries as a source of tumour-targeting agents," Chimica, 2001, pages 205-211, vol. 55, ISSN 0009-4293, The Academic Polymer Scene in Switzerland.	
C58	D NERI ET AL., Edited by P. RIVA, "New Approaches to Tumour Targeting," Cancer Radioimmunotherapy: Present and Future, Nuclear Medicine Department, Hospital M. Bufalini, Cesena, Italy, Harwood academic publishers.	
C59	M BIRCHLER ET AL., "Expression of the extra domain B of fibronectin, a marker of angiogenesis, in head and neck tumors," Laryngoscope, July 2003, pages 1231-1237, vol. 113.	
C60	J PETERS ET AL., "Fibronectin Isoform Distribution in the Mouse: II. Differential Distribution of the Alternatively Spliced EIIIB, EIIIA, AND V Segments in the Adult Mouse," Cell Adhesion and Communication, 1996, pages 127-148, vol. 4, no. 2.	
C61	Chevalier, X., et al., "Increased expression of Ed-B-Containing fibronectin (an embryonic isoform of fibronectin) in human osteoarthritic cartilage," British Journal of Rheumatology, Vol. 35(5), pages 407-415, (abstract only)	
C62		

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C63	Chevalier, X., et al., "Presence of ED-A containing Fibronectin in human articular cartilage from patients with osteoarthritis and rheumatoid arthritis," Journal of Rheumatology, Vol. 23(6), pages 1022-1030, June 1996	
C64	Koukoulis, GK, et al., "Immunolocalization of cellular fibronectins in the normal liver, cirrhosis, and hepatocellular carcinoma," Ultrastructural pathology, Jan.-Feb. 1995, Vol. 19(1), pages 27-43	
C65	Moyano, JV, et al., "Fibronectin type III5 repeat contains a novel cell adhesion sequence, KLDAPT, which binds activated d481 and d487 integrins," Journal of Biological Chemistry, Oct. 3, 1997, Vol. 272(40), pages 24832-24836	
C66	Yu, J L, et al., "Fibronectin exposes different domains after adsorption to a heparinized and an unheparinized poly(vinyl chloride) surface," Biomaterial, March 1997, Vol. 18(56), pages 421-427	
C67	Borsi, L., et al., "Preparation of phage antibodies to the ED-A domain of human fibronectin," Exp. Cell Res., May 1, 1998, Vol. 240(2), p. 244-251	
C68	KACZMAREK, J ET AL., Int. J. Cancer, vol. 58, pages 11-16, 1994.	
C69	KIRKHAM, PM ET AL., J. Mol. Biol., 1999, pages 909-915, vol. 285.	
C70	MANABE, RI-ICHIROH ET AL., Journal of Cell Biology, vol. 139(1), pages 295-307, October 6, 1997.	
C71	MARDON, H J ET AL., Journal of Cell Science, vol. 104, pages 783-792, 1993.	
C72	MENTZIN, A W et al. Cancer 1998, vol. 82, pages 152-158.	
C73	PAOLELLA, GIOVANNI E TAL, Nucleic acids research, vol. 16(8), pages 3545-3557, 1988.	
C74	STAFFA, A ET AL., The Journal of Biological Chemistry, 272(52), pages 33394-33401, December 1997.	
C75	VARTIO, T ET AL., "Differential expression of the ED sequence-containing form of cellular fibronectin in embryonic and adult human tissues," Journal of cell science, vol. 88, pages 419-430, 1987.	
C76	UEDA, YASUO ET AL., "Selective Distribution of Fibronectin to a Tumor-Cell Line," Cancer Letters, vol. 31, pages 261-265, 1986.	
C77	G MARIANI ET AL., "A pilot pharmacokinetic and immunoscintigraphic study with the technetium-99m-labeled monoclonal antibody BC-1 directed against oncofetal fibronectin in patients with brain tumors," Cancer, 15 Dec 1997, pages 2484-9, vol. 80, suppl. 12, ISSN: 0008-543X, Journal code: CLZ, abstract, USA.	
C78	CARINEMOLLA ET AL., Journal of Cell Biology, vol. 108, pages 1139-1148, 1989.	
C79	DARIO NERI ET AL., "High-affinity Antigen Binding by Chelating Recombinant Antibodies (CRAbs)," J. Mol. Biol. (1995) 246, 367-373	
C80	Ashley Publications Ltd., ISSN 1354-3776, "Antibodies to the ED-B domain of fibronectin, their constructs and uses," Exp. Opin. Ther. Patents (1998) 8(7):907-910 Neri et al	

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				Group Art Unit	1643
				Examiner Name	Unknown
				Attorney Docket Number	SCH-1869

C81	FREDRIK NILSSON et al., "The use of phage display for the development of tumour targeting agents," Advanced Drug Delivery Reviews 43 (2000) 165-196	
C82	EPSTEIN, Jay S., "FDA Regulation of HIV-Related Tests and Procedures," AIDS Testing: A comprehensive Guide to Technical, Medical, Social, Legal, and Management Issues, Eds. Schochetman and George, pp. 52-61, Springer-Verlag, New York.	
C83	KORVER et al., "Measurement of Primary In Vivo IgM- and IgG-Antibody Response to KLH in Humans: Implications of Pre-Immune IgM Binding in Antigen-Specific ELISA," Journal of Immunological Methods, 1984, pp. 241-251, vol. 74.	
C84	WEIR, C. et al., "An Immunoglobulin G1 Monoclonal Antibody Highly Specific to the Wall of Cryptosporidium Oocysts," Clinical and Diagnostic Laboratory Immunology, Sept. 2000, p. 745-750, Vol. 7, No. 5.	
C85	NOZAWA, Shiro, et al., "HMMC-1: A Humanized Monoclonal Antibody With Therapeutic Potential Against Müllerian Duct-Related Carcinomas," Clinical Cancer Research, October 15, 2004, pp. 7071-7078, vol. 10.	
C86	23 slide power point of Dr. Zardi (February 2007).	
C87	MATSUURA et al., "The oncofetal domain of fibronectin defined by monoclonal antibody FDC-6: Its presence in fibronectins from fetal and tumor tissues and its absence in those from normal adult tissues and plasma," Proc.Natl.Acad.Sci., vol. 82, pp 6517-6521, October 1985.	
C88	MATSUURA et al., "An $\alpha$ -N-Acetylgalactosaminylation at the Threonine Residue of a Defined Peptide Sequence Creates the Oncofetal Peptide Epitope in Human Fibronectin," The Journal of Biological Chemistry, vol. 264, no. 18, pp 10472-10476, 1989.	
C89	MATSUURA et al., "The Oncofetal Structure of Human Fibronectin Defined by Monoclonal Antibody FDC-6," The Journal of Biological Chemistry, vol. 263, No. 7, pp 3314-3322, 1988.	
C90	ISEMURA et al., "Isolation and Characterization of Human Placenta Fibronectin," J.Biochem. 96, 163-169, 1984.	
C91	BORSI L. et al.: "Selective targeting of tumoral vasculature: comparison of different formats of an antibody (L19) to the ED-B domain of fibronectin," International Journal of Cancer, New York, NY, vol. 102, no. 1, November 1, 2002, pg. 75-85.	
C92	LI ERQUI et al.: "Mammalian cell expression of dimeric small immune proteins (SIP)," Protein Engineering, Oxford University, vol. 10, no. 6, 1997, pg. 731-736.	

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C93	ORLOVA ANNA et al.: "Comparative biodistribution of the radiohalogenated (Br, I and At) antibody A33. Implications for in vivo dosimetry," <i>Cancer Biotherapy and Radiopharmacology</i> , vol. 17, no. 4, 2002, pg. 385-396.	
C94	ZALUTSKY MR et al.: "Astatine-211-labeled radiotherapeutics: An emerging approach to targeted alpha-particle radiotherapy," <i>Current Pharmaceutical Design</i> , Bentham Science Publ., vol. 6, September 2000, pg. 1433-1455.	
C95	RUDIKOFF, S., A.M. Giusti, W.D. Cook and M.D. Scharff, "Single amino acid substitution altering antigen-binding specificity," <i>Proceedings of the National Academy of Sciences</i> , 1982, vol. 79, pgs. 1979-1983.	
C96	MACCULLUM, R.M., A.C.R. Martin and J.M. Thornton, "Antibody-antigen interactions: contact analysis and binding site topography," <i>Journal of Molecular Biology</i> , 1996, vol. 262, pgs. 732-745.	
C97	PASCALIS, IWASHI, TAMURA, PADLAN, GONZALES, SANTOS, GIULANO, SCHUCK, SCHLOM, and KASHMIRI, "Grafting of 'abbreviated' complementarity-determining regions containing specific-determining residues essential for ligand contact to engineer a less immunogenic humanized monoclonal antibody," <i>Journal of Immunology</i> , 2002, vol. 169, pgs. 3076-3084.	
C98	CASSET, F., F. Roux, P. Mouchet, C. Bes, T. Chardes, C. Granier, J. Mani, M. Pugnire, D. Laune, B. Pau, M. Kaczorek, R. Lahana, and A. Rees, "A peptide mimetic of an anti-CD4 monoclonal antibody by rational design," <i>Biochemical and Biophysical Research Communications</i> , 2003, vol. 307, pgs. 198-205.	
C99	VAJDOS, F.F., C.W. Adams, T.N. Breece, L.G. Presta, A.M. Devos, and S.S. Sidhu, "Comprehensive functional maps of the antigen-binding site of an anti-ErbB2 antibody obtained with shotgun scanning mutagenesis," <i>Journal of Molecular Biology</i> , 2002, vol. 320, pgs. 415-428.	
C100	AGRRAVES et al., "Amino Acid Sequence of the Human Fibronectin Receptor," <i>Journal of Cell Biology</i> , Rockefeller University Press, New York, US, Vol. 105, 1987, pp. 1183-1190.	
C101	GARCIA-VELASCO et al., "Regulation of Monocyte Chemoattractant Protein-1 Expression in Human Endometrial Stromal Cells by Integrin-Dependent Cell Adhesion," <i>Biology of Reproduction</i> , Vol. 61, No. 2, August 1999, pp. 548-552.	
C102	WAGNER et al., "Differentiation of Polymorphonuclear Neutrophils in Patients with Systemic Infections and Chronic Inflammatory Diseases: Evidence of Prolonged Life Span and de novo Synthesis of Fibronectin," <i>Journal of Molecular Medicine</i> , Vol. 78, No. 6, 2000, pp. 337-345.	
C103	CASTELLANI et al., "The Fibronectin Isoform Containing the ED-B Oncofetal Domain: A Marker of Angiogenesis," <i>International Journal of Cancer</i> , New York, NY, US, Vol. 59, No. 5, 12/01/1994, pp. 612-618.	

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C104	HASHIMOTO-UOSHIMA et al., "The Alternatively Spliced Domains EIIB and EIIA of Human Fibronectin Affect Cell Adhesion and Spreading," <i>Journal of Cell Science</i> , Vol. 110, No. 18, 1997, pp. 2271-2280.	
C105	KERN A., Eble J., Golbik R., Kuhn K., "Interaction of Type IV Collagen with the Isolated Integrins Alpha 1 Beta 1 and Alpha 2 Beta 1", <i>Eur J. Biochem.</i> 215(a):151-159, 1993.	
C106	NGO J.T., Marks J., Karpus M., "Computational Complexity, Protein Structure Prediction, and the Levinthal Paradox in the Protein Folding Problem," ch. 14, pp. 435-508, Birkhauser, 1994.	
C107	KOGAN T.P., Revelle B.M., Tapp S., Scott D., Beck P.J., "A Single Amino Acid Residue can Determine the Ligand Specificity of E-Selectin", <i>J. Biol Chem.</i> 270(23):14047-55, 1995.	
C108	TAKADA Y et al., "The Primary Structure of the VLA-2/Collagen Receptor Alpha 2 Subunit (Platelet GPIa): Homology to other Integrins and the Presence of a Possible Collagen-Binding Domain", <i>J. Cell Biol.</i> 109(1):397-407, 1989.	
C109	BIRD RE, Hardman KD, Jacobson S, Kaufman BM, Lee SM, Lee T, Pope SH, Riordan GS, Whitlow M. Single-chain antigen-binding proteins. <i>Science.</i> 242(4877):423-426, 1988.	
C110	CHEN W, Culp LA. Adhesion mediated by fibronectin's alternatively spliced Edb (EIIB) and its neighboring type III repeats. <i>Exp. Cell Res.</i> 1996 Feb. 25, 223(1):9-19.	
C111	BATISTA F D et al.; "The two membrane isoforms of human IgE assemble into functionally distinct B cell antigen receptors"; THE JOURNAL OF EXPERIMENTAL MEDICINE., 1 Dec 1996, vol. 184, no. 6, pages 2197-2205	
C112	CLACKSON et al., "Making antibody fragments using phage display libraries," <i>Nature</i> 352: 624-628, August 15, 1991.	
C113	J. PETERS et al., "Expression of the alternatively spliced EIIB segment of fibronectin," <i>Cell Adhesion and Communication</i> , vol. 3 no. 1, 1995, USA, pgs. 67-89, XP002042097.	
C114	ZANG, D. et al., "Antibody specific for extra domain B of fibronectin demonstrates elevated levels of both extra domain B (+) and B(-) fibronectin in osteoarthritic canine cartilage," <i>Matrix Biology</i> , vol. 14 no. 8, October 1995; Stuttgart, Germany, pgs. 623-633, XP002042098.	
C115	DATABASE WPI Week 9017 Derwent Publications, Ltd., London, GB; AN 90-128252 XP002042103 & JP 02076598A (Fujita Gakuen et al.), 15 March 1990.	

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Substitute for form 1449A/PTO

*Complete If Known***INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

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of

14

Application Number	10/088,866
Filing Date	July 2, 2002
First Named Inventor	Ludger Dinkelborg et al.
Group Art Unit	1643
Examiner Name	Unknown
Attorney Docket Number	SCH-1869

C116	DATABASE: WPI Week 9231 Derwent Publications, Ltd., London, GB; AN 92-253398 XP002042104 & JP 04169195A (Fujita Gakuen et al.), 17 June 1992.
C117	ZARDI, L. et al. "Transformed human cells produce a new fibronectin isoform by preferential alternative splicing of a previously unobserved exon." <i>The Embo Journal</i> , vol. 6 no. 8, August 1987, pgs. 2337-2342, XP002042100.
C118	CARNEMOLLA et al., "The inclusion of the type III repeat of ED-B in the fibronectin molecule generates conformational modifications that unmask a cryptic sequence." <i>The Journal of Biological Chemistry</i> , vol. 267 no. 34, 5 Dec. 1992, pgs. 24689-24692, XP002042101.
C119	CARNEMOLLA et al., "Phage antibodies with pan-species recognition of the oncofoetal angiogenesis marker fibronectin ED-B domain," <i>International Journal of Cancer</i> , vol. 68 no. 3, 4 Nov. 1996, pgs. 397-405, XP002042102.
C120	MAGNUSSON, M.K. et al., "Fibronectin: structure, assembly, and cardiovascular implications." <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , Sep. 1998, vol.18 no. 9, pgs. 1363-1370.
C121	CASTELLANI, Patrizia et al., "Differentiation between high- and low-grade astrocytoma using a human recombinant antibody to the extra domain-B of fibronectin," <i>American Journal of Pathology</i> , Nov. 2002, vol. 161 no. 5, pgs. 1695-1700.
C122	Bauters et al., "Accumulation of fetal fibronectin mRNAs after balloon denudation of rabbit arteries." <i>Circulation</i> , vol. 92, pp. 904-911, 1995.
C123	Zhang et al., "Non-invasive imaging of atherosclerotic plaque macrophage in a rabbit model with F-18 FDG PET: a histopathological correlation." <i>BMC Nuclear Medicine</i> , vol. 25, pp. 1-7, 2006.
C124	Dinkelborg et al., "Molecular imaging of atherosclerosis using a technetium-99m-labeled endothelin derivative." <i>J Nucl Med.</i> , vol. 39, pp. 1819-1822, 1998.
C125	Demarlis et al., "Selective targeting of tumour neovasculature by a radionuclated human antibody fragment specific for the ED-B domain of fibronectin." <i>European Journal of Nuclear Medicine</i> , vol. 28, pp. 534- 539, 2001.
C126	Glukhova et al., "Expression of fibronectin variants in vascular and visceral smooth muscle cells in development." <i>Dev Biol.</i> , 1990, vol. 141(1) pp. 193-202, 1990.
C127	Berndorff et al., "Imaging of tumor angiogenesis using 99mTc-labeled human recombinant anti-ED-B fibronectin antibody fragments." <i>J Nucl Med.</i> 2006 Oct;47(10):1707-16.
C128	Marty et al., "Production of functionalized single-chain Fv antibody fragments binding to the ED-B domain of the B-isoform of fibronectin in <i>Pichia pastoris</i> ." <i>Protein Expr Purif.</i> 2001 Feb;21(1):156-64.
C129	George et al., "Radiometal labeling of recombinant proteins by a genetically engineered minimal chelation site: technetium-99m coordination by single-chain Fv antibody fusion proteins through a C-terminal cysteinyl peptide." <i>PNAS USA</i> 1995 Aug 29;92(18):8358-62.

Examiner Signature	/Sheela Huff/	Date Considered	08/11/2008
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		Filing Date	July 2, 2002
		First Named Inventor	Ludger Dinkelborg et al.
		Group Art Unit	1643
		Examiner Name	Unknown
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Examiner Signature	/Sheela Huff/	Date Considered	08/11/2008
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